## AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A system for controlling the speed of a motor, the system comprising:

a motor having a field winding configured to receive a driving signal and generate a magnetic field causing a rotation of a rotor based on the driving signal;

a field modification module proximate with the motor and configured to alter the magnetic field in response to an input signal thereby controlling the speed and torque of the rotor wherein the field modification module includes a coil and the coil is configured to receive the input to generate a flux that modifies the magnetic field thereby controlling the speed and torque of the rotor, ~~and~~ wherein the motor includes a flux carrier extending around the field winding and the rotor to direct the magnetic field, wherein the motor includes a return guide extending from the flux carrier, and wherein the coil ~~being~~ is located outside the flux carrier.

2-3. (Canceled)

4. (Currently Amended) The system according to claim ~~3~~ 1, wherein the coil is wrapped around a portion of the return guide.

5. (Currently Amended) The system according to claim ~~3~~ 1 wherein the coil is located between the flux carrier and the return guide.

6. (Original) The system according to claim 5, wherein the return guide and the flux carrier cooperate to form a cavity and the coil is located inside the cavity.

7-12. (Canceled)

13. (Currently Amended) A system for controlling the speed of a motor, the system comprising:

a motor having a field winding configured to receive a driving signal and generate a magnetic field causing a rotation of a rotor based on the driving signal;

a field modification module proximate with the motor and configured to alter the magnetic field in response to an input signal the speed and torque of the rotor, wherein the motor includes a flux carrier that has a thin portion configured to allow a disruption in the magnetic field, and the field modification module includes a supplementary flux carrier that is positioned proximate the thin portion of the flux carrier and a motion device coupled to the supplementary flux carrier wherein the supplementary flux carrier is movable in relation to the flux carrier thereby adjusting the disruption in the magnetic field.

14. (Original) The system according to claim 13, wherein the motion device is configured to move the supplementary flux carrier closer to the thin portion of the flux carrier thereby increasing the torque of the rotor.

15. (Currently Amended) A system for controlling the speed of a motor, the system comprising:

a motor having a field winding configured to receive a driving signal and generate a magnetic field causing a rotation of a rotor based on the driving signal; and

a field modification module includes a coil external with the motor and configured to receive an input signal to generate a flux that modifies the magnetic field thereby controlling the speed and torque of the rotor;

wherein the motor includes a flux carrier and a return guide for the magnetic field, and the coil is located external to the flux carrier.

16. (Canceled)

17. (Currently Amended) The system according to claim ~~16~~ 15, wherein the coil is wrapped around a portion of the return guide.

18. (Original) The system according to claim 15, wherein the coil is located between the flux carrier and the return guide.

19. (Original) The system according to claim 18, wherein the return guide and the flux carrier cooperate to form a cavity and the coil is located inside the cavity.

20-22. (Canceled)

23. (Currently Amended) A system for controlling the speed of a motor, the system comprising:

a motor having a field winding configured to receive a driving signal and generate a magnetic field causing a rotation of a rotor based on the driving signal; and

a field modification module proximate with the motor and configured to alter the magnetic field in response to an input signal thereby controlling the speed and torque of the rotor, wherein the motor includes a magnet located inside the flux carrier and the coil is located inside the magnet.

24. (Previously Presented) The system according to claim 23, wherein the coil is embedded in the magnet.

25. (Previously Presented) The system according to claim 15, wherein the coil is configured to receive a current to generate a flux having a polarity matching the magnetic field thereby decreasing the speed of the rotor.

26. (Previously Presented) The system according to claim 15, wherein the coil is configured to receive a current to generate a flux having a polarity opposite the magnetic field thereby increasing the speed of the rotor.